

## HORIZON 2020

Excellent Science Global Challenges Competitive Industries

Open to the world!

#### What is the EU's Horizon 2020 programme?

- Almost €80 billion (current prices) research and innovation funding programme (2014-2020)
- A core part of Europe 2020, Innovation Union & European Research Area
  - Investing in future jobs and growth
  - Addressing concerns about livelihoods, safety and environment
  - Strengthening the EU's global position in research, innovation and technology
- Coupling research to innovation from research to retail, all forms of innovation
- Focus on societal challenges facing EU society, e.g. health, clean energy, transport, climate change, food security and others
- Open for participation to all companies, universities, institutes in all EU countries and everywhere in the world!



#### Horizon 2020: structure

#### **Excellent Science**

European Research Council

Future and Emerging Technologies

Marie Sklodowska-Curie actions

Research infrastructures

## **Industrial Leadership**

Leadership in enabling and industrial technologies

(ICT, nano, materials, biotech, manufacturing, space)

Access to risk finance

Innovation in SMEs

## Societal Challenges

Health

Food

Energy

Transport

Climate

Inclusive societies

Security

Horizon 2020 Prizes, Science for Society, Spreading Excellence, JRC, EIT, Euratom



European Commission

#### Horizon 2020: open to the world

Horizon 2020 is open to participation from across the world

#### Automatic EU funding for their participation in R&I actions for:

- ✓ EU Member States (including overseas departments and overseas territories)
- ✓ Countries associated to Horizon 2020 ("Associated Countries", such as Israel, Moldova, Norway, Serbia, Turkey, [Switzerland], ...)
- exhaustive list of countries in annex to work programme



#### Horizon 2020: open to the world (2)

- For other countries (such as Australia, Brazil, Canada, China, India, Japan, Mexico, Russia, United States,...), EU funding for their participation in R&I actions only in exceptional cases:
  - ✓ such funding is provided for in a bilateral scientific & technological cooperation or similar agreement
  - funding for entities established in these countries is included in the call text (e.g. "... entities established in Russia ... will be eligible to receive funding...")
  - ✓ the Commission deems the participation of the entity essential for carrying out the project, for instance because it provides:
    - outstanding competence / expertise
    - access to (unique) research facilities / infrastructure
    - access to a particular geographical environment
    - access to (unique) data (sets)



#### Funding for Russian participants in Horizon 2020

- Individual grants and scholarships under the Marie Sklodowska-Curie mobility programme and by the European Research Council (ERC) are available for Russian scientists
- EU funding for Russian participants in collaborative R&I actions is possible on an exceptional basis



## Funding support from the Russian Ministry of Education & Science (MON): procedure

EU side: Horizon 2020 programme

RU side: Federal Targeted Programme for R&D

Publication of H2020 Work Programmes and calls

Publication of the list of selected calls on the 'Russia's Country Page' of the H2020 Participant Portal

EU coordinator submits a proposal to the EC under the H2020 call

The EC carries out its standard evaluation procedure of all H2020 project proposals, including those with Russian participants

Selection of topics prioritised by the Russian Federation (i.e. those for which financial support to the Russian participants can in principle be offered)

Russian partner(s) of the consortia submit(s) a corresponding proposal to the MON

The MON carries out its standard evaluation procedure of Russian proposals which are part of a submitted H2020 project proposal

Where the EU and MON evaluations overlap, the H2020 project and its Russian part will be funded by, respectively, the EC and the MON according to their funding rules



#### Russia's country page on Horizon 2020 Participant Portal

http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020\_localsupp\_russia\_en.pdf



#### Available local programs or funds that could provide support to Russian Horizon 2020 participants

Horizon 2020 is fully open to participation of entities from across the world in all parts of the programme, and many topics are flagged as being specifically relevant for cooperation with partners outside Europe. Russian researchers, universities, research organisations and enterprises are able to team up with their European partners to participate in projects under Horizon 2020 and make the best use of Europe's excellent opportunities in research and innovation.

Russian researchers and organisations are encouraged to participate in all actions of Horizon 2020 as consortium members and take part in the proposal submission to the European Commission.

#### EU-Russia Co-funding Mechanism for Research and Innovation Projects

To support Russian participation in Horizon 2020 actions and in view of the fact that participants from Russia are no longer automatically funded by the EU, the Ministry of Education and Science of the Russian Federation publishes dedicated calls to offer funding support for Russian Horizon 2020 participants in accordance with its own call procedures (Russian Federal Programme (FTP) "R&D in Priority Areas of Development of the Russian S&T Complex 2014-2020"). Russian applicants to these calls will have to provide a document acknowledging their participation in the consortium of the joint Horizon 2020 proposal, submitted under the Horizon 2020 call.

The Ministry of Education and Science of the Russian Federation established a functional mailbox horizon2020@mon.gov.ru to which the Russian scientific community may send enquiries about support available in Russia for participation in Horizon 2020.

In addition, the Russian Foundation for Assistance to Small Innovative Enterprises (FASIE) may be able to support the participation of small innovative Russian enterprises in Horizon 2020 projects on a case-by-case basis according to its own funding rules.

Enquiries concerning participation in Horizon 2020 may also be directed to the offices of the appointed Russian National Contact Points:

http://ec.europa.eu/research/participants/portal/desktop/en/support/national\_contact\_points.html

#### Horizon 2020: benefits of participation

"Участие в Рамочной программе EC помогло нашему университету значительно увеличить число совместных публикаций в международных научных журналах..."

"Thanks to this experience we became part of the world-leading scientific network in our area. It served well to building our international reputation..."

"Благодаря участию в проекте, мы смогли вывести свои технологии и ноу-хау на мировой рынок. Это стало качественным скачком в развитии нашей деятельности..."

"We were able to benchmark results of our research activities at the world level..."

"Участие в проектах научной программы ЕС – это международный знак качества, признание высокого уровня проводимых исследований..."

"Unsere Teilnahme an dem Projekt des Rahmenprogramms hat uns Zugang zu erstklassigen Daten und Forschungseinrichtungen gegeben..."



#### Horizon 2020 statistics\*: Russia's participation

102 eligible proposals submitted involving 132 applicants from Russia

28 proposals retained for funding involving 42 successful applicants from Russia

Russia's applicant success rate of 31,8% is almost twice as high as the average Third Countries applicant success rate

#### **Among the Third Countries Russia ranks:**

- 11th in terms of number of applicants
- 19th in terms of applicants success rate
- 6th in number of participations and
- 6th in budget share

\* As of October 2015



## Horizon 2020 Work Programme 2016-17: Open opportunities

- Budget of almost €16 billion for two years.
- Nearly 600 topics covered.
- All research calls are open for Russian project partners.
- Please read the Work Programmes of the calls.
- Please apply
  - as project participant in a research consortium,
  - or for a mobility grant to the Marie Skłodowska-Curie programme,
  - or a grant from the European Research Council.



#### **ERA-NET instrument**

The "ERA-NET instrument" under Horizon 2020 supports public-public partnerships in their preparation, establishment of networking structures, design, implementation and coordination of joint activities as well as topping up of single joint calls and of actions of a transnational nature.

Typically, an ERA-Net brings together national research-funding organisations that wish to implement a joint transnational call for research proposals (for which the EU can provide 'top-up' funding).

From 2004 to 2012, over €2 billion of public funding were spent by different programmes investing jointly in coordinated research across borders.

Funding organisations from "third countries" (such as Russia) can and do participate in ERA-Nets.



#### Ongoing ERA-NETs with Russian participation

- **ERA.Net RUS Plus** strengthening STI links between Russia and the European Research Area: *Ministry of Education & Science, RFBR, RFH, Ural and Far Eastern Branches of Russian Academy of Sciences. Foundation for Assistance to Small Innovative Enterprises (FASIE).*
- **ERA-IB 2** the ERA-NET "Towards an ERA in Industrial Biotechnology" 2: *Russian funding partner since 2011: FASIE.*

The ERA-IB 2 transnational Call 2015 opened on 3 November 2015. The deadline for submission of proposals is 1 February 2016. Detailed information at <a href="http://www.era-ib.net/7th-joint-call-0">http://www.era-ib.net/7th-joint-call-0</a>

• **EuroTransBio** – an ERA-NET in Biotechnology: *Russian funding partner since 2012:* FASIE.

11th ETB Call opened on 1 October 2015. The deadline for submission of proposals is 29 January 2016. Detailed information at <a href="https://www.eurotransbio.eu/index.php?index=12">https://www.eurotransbio.eu/index.php?index=12</a>

- ASPERA 2 an ERA-NET on Astroparticle Physics: Russian funding partner: RFBR.
- **EUPHRESCO 2** European Phytosanitary Research Coordination II: Russian partner: All-Russian Plant Quarantine Centre (FGU VNIIKR).
- **M-era.Net -** an ERA-NET in materials science and engineering: *Russian funding partner:* FASIE.
- **BONUS** Baltic Sea Science Network of Funding Agencies (Art. 185 initiative): RFBR & RFH participate in the BONUS calls on the basis of a Memorandum of Cooperation.

BONUS call 2015: Blue Baltic opened on 9 November 2015. Preregistration deadline: 9 February 2016. Proposal submission deadline: 10 March 2015. Detailed information at <a href="http://www.bonusportal.org/programme/competitive calls/bonus call 2015 blue baltic">http://www.bonusportal.org/programme/competitive calls/bonus call 2015 blue baltic</a>

#### H2020 call for expressions of interest from experts

Join the database of independent experts for European research and innovation.

The European Commission appoints independent experts to assist with research and innovation assignments including the evaluation of proposals, monitoring of projects, and evaluation of programmes, and design of policy.

Register online at:

http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html



#### **Useful links**

- Horizon 2020 official webpage: http://ec.europa.eu/programmes/horizon2020/
- Participant Portal: <a href="http://ec.europa.eu/research/participants/portal/">http://ec.europa.eu/research/participants/portal/</a>
- European Commission Research & Innovation: http://ec.europa.eu/research/index.cfm
- Delegation of the European Union to the Russian Federation:

   http://www.EUinRussia.ru

  Science & Technology section:
   delegation-russia-science@eeas.europa.eu
- Ministry of Education & Science of the Russian Federation (for enquiries about the possibility of funding support): horizon2020@mon.gov.ru
- EU-Russia Year of Science 2014:
  http://eu-russia-yearofscience.eu
  http://godnauki-rossiya-ec.ru





# Thank you for your attention!

# Participation of Russian organisations in the EU's Framework Programmes for research:

**PROJECT EXAMPLES** 

#### **DIABIMMUNE** — Pathogenesis of type 1 Diabetes

Testing the hygiene hypothesis

Objective: to test the hygiene hypothesis in type 1 diabetes and other immune-mediated diseases, and if confirmed to define the mechanisms mediating the influence of the standard of hygiene on the immune system and leading to dysregulated immune responses

Project Coordinator: Helsingin Yliopisto (Finland)

**Project Participants: 12 organisations from 5 countries** 

#### Russian Partners:

- Ministry of Health & Social Development (Karelian Republic of the Russian Fed.)
- Petrozavodsk State University

Project EU Contribution: € 5,999,900

Research Field: Biotechnology - Life Sciences - Medicine - Health

## **IRENE** - In silico rational engineering of novel enzymes

Objective: development of computational methods and strategies that will enable to rationally design and produce the next generation of efficient biocatalysts for industrial applications

Project Coordinator: Universita' degli Studi di Trieste (Italy)

Project Participants: 11 organisations from 6 countries

#### **Russian Partners:**

- Belozersky Institute of Physicochemical Biology of the Moscow State University
- B.P.Konstantinov Petersburg Nuclear Physics Institute
- Shemyakin and Ovchinnikov Institute Of Bioorganic Chemistry RAS
- Molecular Technologies
- BIOTIR Bio/ Techologies, Innovations, Researches LTD

Project EU Contribution: € 1,999,995

Research Field: Agricultural biotechnology

## **OPENAIR** — Optimisation for low Environmental Noise impact AIRcraft

Objective: reduction of both engine- and airframe noise

Project Coordinator: SNECMA SA (France)

Project Participants: 49 organisations from 14 countries

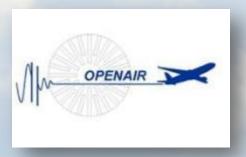
#### Russian Partners:

- Joint Institute for High Temperatures RAS
- Andreyev Acoustics Institute
- The Central Aerohydrodynamic Institute named after Prof.
  N.E. Zhukovsky

Project EU Contribution: € 18,273,829

Research Field: Aerospace Technology - Environmental

**Protection** 



# **STAR-IDAZ** - Global Strategic Alliances for the Coordination of Research on the Major Infectious Diseases of Animals and Zoonoses

Objective: to improve coordination of research activities on the major infectious diseases of livestock and zoonoses so as to hasten the delivery of improved control methods.

Project Coordinator: The Secretary of State for Environment, Food and Rural Affairs (UK)

**Project Participants: 22 organisations from 17 countries** 

#### Russian Partners:

- Moscow State Academy of Veterinary Medicine and Biotechnology
- International Centre for Innovations in Science, Technology and Education

Project EU Contribution: € 999,130

Research Field: Animal health



## **COLLAB4SAFETY - Towards sustainable global food safety collaboration**

Objective: to establish a global network on food safety with the aim of developing a sustainable coordination platform for exchange of food safety information about research findings, capacity building and policies and facilitate the control and mitigation of existing and emerging food risks.

Project Coordinator: Stichting Dienst Landbouwkundig Onderzoek (Netherlands)

Project Participants: 10 organisations from 8 countries

Russian Partner: A.N. Bach Institute of Biochemistry of RAS

Project EU Contribution: € 999,990

Research Field: Food research



#### PROGRESS - Prediction of Geospace Radiation Environment and solar wind parameters

Objective: to produce a set of forecast tools to accurately predict the occurrence and severity of space weather events.

Project Coordinator: The University of Sheffield (UK)

Project Participants:8 organisations from 7 countries (U.K.,

Finland, France, Russia, Sweden, Ukraine, United States)

Russian Partner: Skolkovo Institute of Science and Technology

Project EU Contribution: € 2,358,230.5

Research Field: Space